

CLAIMS

What is claimed is:

1. A system comprising:

a mobile communications device capable of communicating over a wireless network;

an output device coupled to a port of the communications device through which output information received by the communications device over the wireless network is transmitted to the output device, the output device comprising a controller to print output based on the output information transmitted to the output device.

2. The system of claim 1, wherein the mobile communications device comprises a handheld device.

3. The system of claim 2, wherein the mobile communications device comprises a cellular telephone.

4. The system of claim 2, wherein the mobile communications device comprises a personal digital assistant.

5. The system of claim 1, wherein the output information comprises audiovisual information.

6. The system of claim 1, wherein the wireless network comprises a digital network.

7. The system of claim 1, wherein the wireless network comprises the Internet.

8. A system comprising:

mobile communication means for communicating over a wireless network;

output means for providing output based on output information received from a port of the mobile communications means through which information received by the mobile communications means over the wireless network is transmitted.

9. An output device comprising:

a port that is constructed and arranged to communicate with a mobile communications device capable of communicating over a wireless network; and

a controller to print output based on output information received by the mobile communications device over the wireless network and transmitted to the output device through the port.

10. The output device of claim 9, wherein the mobile communications device comprises a handheld device.

11. The output device of claim 10, wherein the mobile communications device comprises a cellular telephone.

12. The output device of claim 10, wherein the mobile communications device comprises a personal digital assistant.

13. The output device of claim 9, wherein the output information comprises an image.

14. The output device of claim 9, wherein the wireless network comprises a digital network.

15. The output device of claim 9, wherein the wireless network comprises the Internet.

16. In an output device, a method comprising steps of:

- (A) receiving output information from a mobile communications device, wherein the output information is received by the mobile communications device over a wireless network; and
- (B) providing output based on the output information.

17. The method of claim 16, wherein the step (A) comprises a step of receiving the output information from the mobile communications device through a port of the output device that is coupled to a port of the mobile communications device.

18. The method of claim 16, wherein the output information comprises audiovisual information.

19. The method of claim 16, wherein the wireless network comprises the Internet.

20. A system comprising:

a mobile communications device having a mode of operation in which the mobile communications device communicates over an internet and enables a user to interact with the internet using an interface provided by the mobile communications device;

an output server capable of serving output information to the mobile communications device over the internet; and

an output device coupled to a port of the mobile communications device through which output information served by the output server to the mobile communications device over the internet while the mobile communications device is operating in said mode of operation may be transmitted to the output device.

21. The system of claim 20, wherein the mobile communications device comprises a cellular telephone.

22. The system of claim 20, wherein the internet comprises the public Internet.

23. The system of claim 20, wherein the output information served by the output server to the mobile communications device comprises an image to be printed by the output device.

24. A system comprising:

mobile communications means having a mode of operation in which the mobile communications device communicates over an internet and enables a user to interact with the internet using an interface provided by the mobile communications means;

output server means capable of serving output information to the mobile communications means over the internet; and

output means coupled to a port of the mobile communications means through which output information served by the output server means to the mobile communications means over the internet while the mobile communications means is operating in said mode of operation may be transmitted to the output means.

25. An output device comprising:

a port coupled to a port of a mobile communications device, the mobile communications device having a mode of operation in which the mobile communications device communicates over an internet and enables a user to interact with the internet using an interface provided by the mobile communications device, the port of the output device being constructed and arranged to receive from the mobile communications device providing output information served by a output server to the mobile communications device over an internet while the mobile communications device is operating in said mode of operation; and

a controller to receive the output information and produce printed output based on the output information.

26. The output device of claim 25, wherein the mobile communications device comprises a cellular telephone.

27. The output device of claim 25, wherein the internet comprises the public Internet.

28. The output device of claim 25, wherein the output information comprises audiovisual information to be rendered by the output device.

29. In an output device, a method comprising steps of:

- (A) receiving, from a mobile communications device having a mode of operation in which the mobile communications device communicates over an internet and enables a user to interact with the internet using an interface provided by the mobile communications device, output information transmitted to the mobile communications device over the internet by a output server; and
- (B) providing output based on the output information received in the step (A).

30. The method of claim 29, wherein the mobile communications device comprises a cellular telephone.

31. The method of claim 29, wherein the internet comprises the public Internet.

32. The method of claim 29, wherein the output information transmitted by the output server to the mobile communications device comprises audiovisual information to be rendered by the output device.

33. In an output server, a method comprising a step of:
(A) transmitting output information to an output device through a mobile communications device having a mode of operation in which the mobile communications device communicates over an internet and enables a user to interact with the internet using an interface provided by the mobile communications device, said step of transmitting being performed while the mobile communications device is operating in said mode of operation.

34. The method of claim 33, wherein the mobile communications device comprises a cellular telephone.

35. The method of claim 33, wherein the internet comprises the public Internet.

36. The method of claim 33, wherein the output information transmitted by the output server comprises audiovisual information to be rendered by the output device.

37. The method of claim 33, wherein the output device comprises a port that receives the output information transmitted by the output server from a port of the mobile communications device.

38. The method of claim 33, wherein the output information comprises processed output information, and wherein the method further comprises a step of:

- (B) prior to the step (A), modifying source output information based on capabilities of the output device to produce the processed output information.

39. The method of claim 38, wherein the step (B) comprises a step of modifying the format of the source output information to produce the processed output information, whereby the processed output information has a format at which the output device is capable of providing output.

40. The method of claim 38, wherein the step (B) comprises a step of modifying the file size of the source output information to produce the processed output information, whereby the processed output information has a file size at which the output device is capable of providing output.

41. A method comprising steps of:

- (A) transmitting output information to an output device through a mobile communications device having a mode of operation in which the mobile communications device communicates over an internet and enables a user to interact with the internet using an interface provided by the mobile communications device, said step of transmitting being performed while the mobile communications device is operating in said mode of operation;
- (B) receiving, from the mobile communications device while the mobile communications device is operating in said mode of operation, the output information transmitted to the output device; and
- (C) providing output based on the output information received in the step (B).

42. The method of claim 41, wherein the mobile communications device comprises a cellular telephone.

43. The method of claim 41, wherein the internet comprises the public Internet.

44. The method of claim 41, wherein the output information transmitted in the step (A) comprises audiovisual information to be rendered by the output device.

45. A system comprising:

a mobile communications device through which a user conducts a transaction with a transaction service over a first wireless network;

an output server that serves output information over a second wireless network in response to completion of the transaction; and

an output device coupled to a port of the mobile communications device through which the output device may receive the output information served by the output server.

46. The system of claim 45, wherein the first wireless network comprises an analog network and the second wireless network comprises a digital network.

47. The system of claim 45, wherein the first wireless network comprises the Internet.

48. The system of claim 45, wherein the second wireless network comprises the Internet.

49. A system comprising:

mobile communications means through which a user conducts a transaction with a transaction service over a first wireless network;

output server means for serving output information over a second wireless network in response to completion of the transaction;

output means coupled to a port of the mobile communications means through which the output means may receive the output information served by the output server means.

50. A method comprising steps of:

- (A) in response to completion of a transaction by a user with a transaction service over a first wireless network using a mobile communications device, transmitting output information over a second wireless network; and
- (B) receiving the output information from a port of the mobile communications device; and
- (C) rendering the output information.

51. The method of claim 50, wherein the step (A) comprises steps of:

- (A) (1) at an output server, transmitting the output information to the transaction service; and
- (A) (2) transmitting the output information to the mobile communications device.

52. The method of claim 50, wherein the step (A) comprises a step of:

- (A) (1) at an output server, transmitting the output information to the mobile communications device.

53. The method of claim 50, wherein the mobile communications device has a mode of operation in which the mobile communications device communicates over an internet and enables a user to interact with the internet using an interface provided by the mobile communications device, and wherein the steps (A) and (B) are performed while the mobile communications device is operating in said first mode of operation.

54. The method of claim 53, wherein the step (C) is performed while the mobile communications device is operating in said mode of operation.

55. The method of claim 50, wherein the mobile communications device has a first mode of operation in which the mobile communications device communicates over an internet and enables a user to interact with the internet using an interface provided by the mobile communications device, wherein the mobile communications device has a second mode of operation in which the mobile communications device operates as a modem, wherein the user completes the transaction while the mobile communications device is operating in the first mode of operation, and wherein the step (B) is performed while the mobile communications device is operating in the second mode of operation to transmit the output information to the output device.

56. The method of claim 55, further comprising a step of:

(D) prior to the step (B), placing a telephone call to the mobile communications device to establish a connection to the mobile communications device and to place the mobile communications device in the second mode of operation.

57. The method of claim 56, wherein the step (D) is performed by the output server.

58. The method of claim 56, wherein the step (D) is performed by the transaction service.

59. The method of claim 50, wherein the mobile communications device has a first mode of operation in which the mobile communications device operates as a wireless telephone, wherein the mobile communications device has a second mode of operation in which the mobile communicates devices operates as a modem, wherein the user completes the transaction while the mobile communications device is operating in the first mode of operation, and wherein the step (B) is performed while the mobile communications device is operating in the second mode of operation to transmit the output information to the output device.

60. The method of claim 59, further comprising a step of:

(D) prior to the step (B), placing a telephone call to the mobile communications device to establish a connection to the mobile communications device and to place the mobile communications device in the second mode of operation.

61. The method of claim 60, wherein the step (D) is performed by the output server.

62. The method of claim 60, wherein the step (D) is performed by the transaction service.

63. In an output server, a method comprising steps of:

- (A) processing source output information based on capabilities of an output device to produce processed output information;
- (B) transmitting the processed output information to the output device over a wireless network through a mobile communications device to which the output device is coupled.

64. The method of claim 63, further comprising a step of:

- (C) prior to the step (A), obtaining from the output device information descriptive of the capabilities of the output device.

65. The method of claim 64, wherein the step (C) comprises a step of transmitting the information descriptive of the capabilities of the output device from the output device to the output server over the wireless network.

66. The method of claim 63, wherein the step (A) comprises a step of modifying the format of the source output information to produce the processed output information, whereby the processed output information has a format at which the output device is capable of printing.

67. The method of claim 63, wherein the step (A) comprises a step of modifying the file size of the source output information to produce the processed output information, whereby the processed output information has a file size at which the output device is capable of rendering.

68. The method of claim 63, wherein the mobile communications device comprises a cellular telephone.

69. The method of claim 63, wherein the wireless network comprises an internet.